

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P2981/PCT	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/003463	International filing date (day/month/year) 01.04.2004	Priority date (day/month/year) 04.04.2003
International Patent Classification (IPC) or national classification and IPC		
Applicant SWISSLOG AG		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 11 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 7 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input checked="" type="checkbox"/>	Box No. II	Priority
<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input checked="" type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/003463

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 4-10 as originally filed/furnished
- pages* 1, 2, 3, 3a received by this Authority on 11.04.2005 with the letter of 11.04.2005
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1-13 received by this Authority on 11.04.2005 with the letter of 11.04.2005
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/1 as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/003463

Box No. II

Priority

1. ☒ This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:
- ☒ copy of the earlier application whose priority has been claimed (Rule 66.7(a)).
- ☐ translation of the earlier application whose priority has been claimed (Rule 66.7(b)).
2. ☐ This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rule 64.1). Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/003463

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 5-13

because:

☐ the said international application, or the said claims Nos. _____
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. _____
are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. _____ are so inadequately supported
by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 7-15

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ See Supplemental Box for further details.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/003463

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation to restrict or pay additional fees the applicant has:
 - ☒ restricted the claims.
 - ☐ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ neither restricted the claims nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:
 - ☐ complied with.
 - ☒ not complied with for the following reasons:

See Supplemental Box

4. Consequently, this report has been established in respect of the following parts of the international application:
 - ☐ all parts.
 - ☒ the parts relating to claims Nos. 1-4

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/003463

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-4	YES
	Claims		NO
Inventive step (IS)	Claims	1-4	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-4	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
<p>DE-A-3826518 (D1) is considered the closest prior art and discloses (in column 1 of the description) a fully automated small parts store and a method for the takeover and/or handover and for the transport (in particular for the paperless picking) of goods that are located in the store using a vehicle (moving table) which travels along the store aisles,</p> <p>the vehicle calling at a predetermined picking location in a fully automated and controlled manner and taking over or handing over goods at that location, the takeover or handover also being controlled in a fully automated manner (column 1, line 1).</p> <p>The subject matter of claim 1 differs from that of D1 in that the takeover or handover is controlled in a fully automated manner at the picking location itself, in that the vehicle determines the weight and quantity of the goods that have been taken or handed over and compares this to a setpoint value.</p>			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/003463

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

The objective problem of interest lies in the prevention of incorrect picking of goods.

The solution of weighing the goods directly at the picking location and of determining the quantity thereof and then comparing this with a setpoint value so as to prevent an incorrect delivery is neither suggested nor anticipated by the available prior art.

The subject matter of dependent claims 2-4 is also not anticipated or suggested by the closest prior art, since said claims refer back to claim 1.

Owing to a lack of unity of invention no search was carried out with respect to the subject matter of claims 5-13 (originally filed as claims 7-15) and therefore those claims could not be taken into consideration during the examination.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box IV**1. Lack of unity of invention:****1.1. Lack of unity of invention "a priori", PCT Rule 13 and Article 34 (3) (a) :**

The **originally submitted** application contained two independent claims of different categories, claim 1 (method) and claim 8 (system).

The special technical features according to the characterising parts of independent claims 1 and 8 could be summarised as follows:

Claim 1: the handover method as per the preamble of claim 1 includes the steps of fully automated control of the picking location and fully automated handover of the goods.

The objective technical problem of interest could therefore be worded as follows: "fully automated picking as well as storage and removal from storage".

Claim 8: the system for a handover method as per the preamble of claim 8, characterised in that a rail guide for guiding an electric

Supplemental Box

overhead conveyor is at least partially provided in the warehouse aisles.

The objective technical problem of interest could therefore be worded as follows: "provision of special conveying means, in this case the use of an electric overhead conveyor which is guided on rails".

1.2. Lack of unity of invention "a posteriori":

DE-A-3826518 (D1) is considered the closest prior art and discloses (in column 1 of the description) a fully automated small parts store and a method for the takeover and/or handover and for the transport (in particular for the paperless picking) of goods that are located in the store using a vehicle (moving table) which travels along the store aisles, the vehicle calling at a predetermined picking location in a fully automated and controlled manner and taking over or handing over goods at that location, the takeover or handover also being controlled in a fully automated manner (column 1, line 1).

The subject matter claimed in the **original** claim 1 thus lacks novelty (PCT Article 33(2)). The subject matter submitted in the original claim 1 is also anticipated by US-A-4,950,119 (D2) and EP-A-140983 (D3).

Supplemental Box

The lack of unity of invention "a posteriori" (PCT Rule 13) also applies to claims 2-4 and 6-7, which refer back directly to claim 1 and which comprise different technical features that have different technical effects for solving different objective problems.

Furthermore, the subject matter of claims 2, 4, 5 and 6 is also anticipated by D1 and that of claim 3 by D2 and therefore they do not meet the requirements of PCT Article 33(3).

Each individual invention thus contains the following specific "special" technical features:

claim 2: "determining the weight of the goods that have been taken over". The objective technical problem lies in checking whether the goods are complete;

claim 3: "determining the quantity of goods that have been taken over". The objective technical problem lies in checking the picking instructions;

claim 4: "recognition of the picking location by the vehicle". The objective technical problem lies in the method of marking the picking location;

claim 6: "automatic recognition and adjustment of the handover plane according to the height of storage". The objective technical problem lies in the positioning of the handover device for the handover

Supplemental Box

procedure;

claim 7: "the taking of items from the warehouse other than the picked goods". The objective technical problem lies in extending the warehouse picking method to other functions.